Application No.: 09/840,082

Page 5

REMARKS

In the Office Action dated January 16, 2003, claims 1-20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicants' allegedly admitted prior art in view of U.S. Patent No. 6,466,282B2 to Sasuga et al. and U.S. Patent No. 6,266,117B1 to Yanagawa et al.

By this Amendment, Applicants have amended claims 1, 5, 9, 11, 15, and 19 to clarify the subject matter of the invention and to improve the form and expressions. Accordingly, claims 1-20 are presently pending in this application.

Attached hereto is a marked-up version of the changes made to the claims by this

Amendment. The attached page is captioned "VERSION WITH MARKINGS TO SHOW

CHANGES MADE".

Applicants respectfully traverse the rejection of claims 1-20 under 35 U.S.C. § 103 insomuch as the Examiner may still consider the rejection applicable to the pending claims as amended. Independent claims 1, 5, 9, 11, 15, and 19, as amended, each recite a combination of elements or steps having the features of "a light—shielding member . . . extending from an end at the pixel electrode side of a metal thin film . . . into the pixel area with a margin sufficient to block light incident on the metal tin film," or like features. None of the cited references, singly or in combination, teaches or even suggests the combination of elements or steps having such features of the present invention.

In FIG. 2 of <u>Sasuga et al.</u>, the black matrix (BM) does not extend sufficiently to block light incident on source electrode SD1. And contrary to the Examiner's apparent understanding, as shown in FIGs. 1 and 3 of <u>Sasuga et al.</u>, the black matrix (BM) does not at all cover metal

Application No.: 09/840.082

Page 6

film patterns d2 and d3 provided for Cadd. Thus, <u>Sasuga et al.</u> does not disclose or suggest at least the above-recited features of the present invention.

Yanagawa et al. in no way cure this deficiency of the Sasuga et al. reference. While Yanagawa et al. appears to discuss reflection of external light by metal electrode at column 16, it simply does not disclose or suggest at least the above-recited features of the present invention.

Yanagawa et al. suggests use of low reflectance layer to reduce the alleged reflection problem.

Nowhere does Yanagawa et al. suggest extending the light-shielding layer or black matrix in a manner recited in independent claims 1, 5, 9, 11, 15, and 19, as amended.

Thus, if one were to combine the teachings of Sasuga et al. and Yanagawa et al., such a combination would lead to replacement of high reflectance layers with high reflectance layers. Therefore, even assuming for the sake of argument that there exists a proper motivation or suggestion to combine the two references (which Applicants do not admit), such a combination would not teach or suggest at least the above-referenced features of "a light—shielding member . . . extending from an end at the pixel electrode side of a metal thin film . . . into the pixel area with a margin sufficient to block light incident on the metal tin film," or like features, recited in the independent claims, as amended.

At least because not all the claim limitations are taught or suggested in the cited references. Applicants respectfully submit that no proper *prima facie* case of obviousness has been established. As instructed by MPEP §2143.03, "to establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art."

Application No.: 09/840,082

Page 7

Thus, Applicants respectfully request withdrawal of the rejection of independent claims 1, 5, 9, 11, 15, and 19.

Dependent claims 2-4, 6-8, 10, 12-14, 16-18, and 20 are allowable at least because of their respective dependencies upon allowable claims 1, 5, 9, 11, 15, and 19.

In view of the foregoing, Applicants respectfully request reconsideration and reexamination of this application and the timely allowance of the pending claims.

If there are any other fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-0310. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted

MORGAN, LEWIS & BOCKIUS LLP

Dated: April 16, 2003

By:

Masao Yoshimuza Reg. No. 52,526

CUSTOMER NO. 009629 MORGAN, LEWIS & BOCKIUS LLP

1111 Pennsylvania Avenue, NW Washington, DC 20004 Tel. 202.739.3000

Fax 202.739.3001

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Claims 1, 5, 9, 11, 15, and 19 have been amended as follows:

- 1. (Amended) A liquid crystal display device comprising:
- a pixel electrode at a pixel area between a gate line and a data line;

a switching device at an intersection between the gate line and the data line, the switching device comprising a light-shielding member overlapping the switching device and extending from an end at the pixel electrode side of a metal thin film provided within the switching device into the pixel area[, for blocking] with a margin sufficient to block light incident on the metal thin film.

- 5. (Amended) A liquid crystal display device comprising:
- a pixel electrode at a pixel area between a gate line and a data line:
- a charging device on the gate line, the charging device comprising:
 - a metal thin film:
- a light-shielding member overlapping the charging device and extending from an end at the pixel electrode side of [a] the metal thin film into the pixel area[, for blocking] with a margin sufficient to block light incident on the metal thin film.
- 9. (Amended) A liquid crystal display device comprising:
- a pixel electrode at a pixel area between a gate line and a data line:

Application No.: 09/840,082

Page 9

a thin film transistor at an intersection between the gate line and the data line and including a first metal thin film:

a storage capacitor on the gate line and including a second metal thin film;

a black matrix at a boundary portion between pixel areas;

a first dummy black matrix connected to the black matrix and extending from an end at the pixel electrode side of the <u>first</u> metal thin film into the pixel area <u>with a margin sufficient to</u>

block light incident on the first metal thin film; and

a second dummy black matrix connected to the black matrix and extending from an end at the pixel electrode side of the second metal thin film into the pixel area with a margin

sufficient to block light incident on the second metal thin film.

11. (Amended) A method of fabricating a liquid crystal display device comprising the steps of:

forming a pixel electrode at a pixel area between a gate line and a data line;

forming a switching device including a metal thin film at an intersection between the gate

line and the data line; and

forming a light-shielding member for blocking light incident on the metal thin film to overlap with the switching device, the light-shielding member extending from an end at the pixel electrode side of a metal thin film of the switching device into the pixel area with a margin sufficient to block the light incident on the metal thin film.

Application No.: 09/840.082

Page 10

15. (Amended) A method of fabricating a liquid crystal display device comprising the steps of:

forming a pixel electrode at a pixel area between a gate line and a data line;

forming a charging device including a first metal thin film on the gate line; and

forming a light-shielding member for blocking light incident on the metal thin film to overlap the metal thin film, the light-shielding member extending from an end at the pixel electrode side of the first metal thin film into the pixel area with a margin sufficient to block the light incident on the metal thin film.

19. (Amended) A method of fabricating a liquid crystal display device comprising the steps of:

forming a pixel electrode at a pixel area between a gate line and a data line on a rear substrate:

forming a thin film transistor including a first metal thin film at an intersection between the gate line and the data line on the rear substrate;

forming a storage capacitor including a second metal thin film on the rear substrate and overlapping the gate line;

forming a black matrix on a front substrate opposed to the rear substrate at a boundary portion between pixel areas;

Application No.: 09/840,082

Page 11

forming a first dummy black matrix extending from an end at the pixel electrode side of the first metal thin film into the pixel area on the front substrate with a margin sufficient to block light incident on the first metal thin film; and

forming a second dummy black matrix extending from an end at the pixel electrode side of the second metal thin film into the pixel area on the front substrate with a margin sufficient to block light incident on the second thin film.